

[re]DUX

adaptive architecture
[re]use
mixed use

an Architectural Thesis by Rachel M. Horntvedt

problem statement

If we as architects look to the past to inform our design decisions; what implications does a building's history/past have on its present and future potential for redevelopment?

claim

Historically, some building types lend themselves better to future [re]development than others, and because of this, it is necessary that the architect/developer consider how different building types allow for a feasible transition from one function to another.

premises

As the push for the sustainability of our built environment increases, it is critical that architects/developers recognize the inevitable need for our buildings to transition into a variety of functions in order to both support and survive in the economy in which they exist.

There is constantly a need for the structures around us to change to adapt to new user groups, changes in taste/style and technology.

The feasibility of a building to transition between functions and adapt, greatly increases the lifespan of the buildings.

Some structures are more capable than others to make the transition from one function to another.

theoretical premise/ unifying idea

project justification

The built environment is ever changing, and as our structures age and become obsolete, it is important that they can transition from their initial purpose/function, extending their lifespan and decreasing the need for new construction.

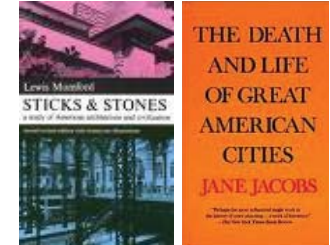
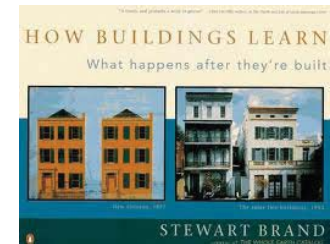
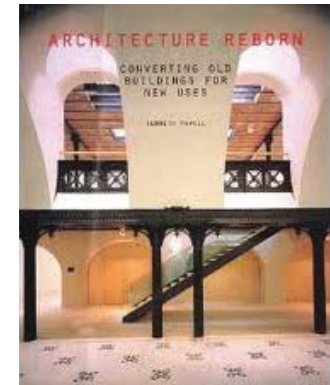
concept
past
present
future
adaptability

“He who
controls
the present
controls the
past...
he who
controls the
past controls
the future.”

-George Orwell

“The issue is
no longer
about new
versus old,
but about
the nature
of the vital
relationship
between the
two.”

-Kenneth Powell
*Architecture Reborn:
Converting Old Buildings
for New Uses*



concept
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adaptability

“Cities need old buildings so badly it is probably impossible for vigorous streets and districts to grow without them.”

-Jane Jacobs
The Death and Life of Great American Cities

The legacy of our buildings, what we choose to tear down and what we choose to keep, defines who we are and what we value. In understanding the past we create the potential to combine the old fabric of our cities with new ideas, creating almost limitless resources for the future. Historic buildings help define the character of our communities and provide a tangible link to the past.

The historic industrial buildings that we choose to keep are physical and tangible reminders of the original nature of the place, and they become material evidence of cultural development. Without the element of time, the past cannot be represented in space, but character-defining features help to illuminate the industrial traditions, and provide evidence of a particular history that emphasizes a place's social construction and continuum through time.



concept
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“The ‘old’ building... is a reservoir of energy. To demolish it will require additional energy. The new building proposed to be built in its place will require still more energy.”

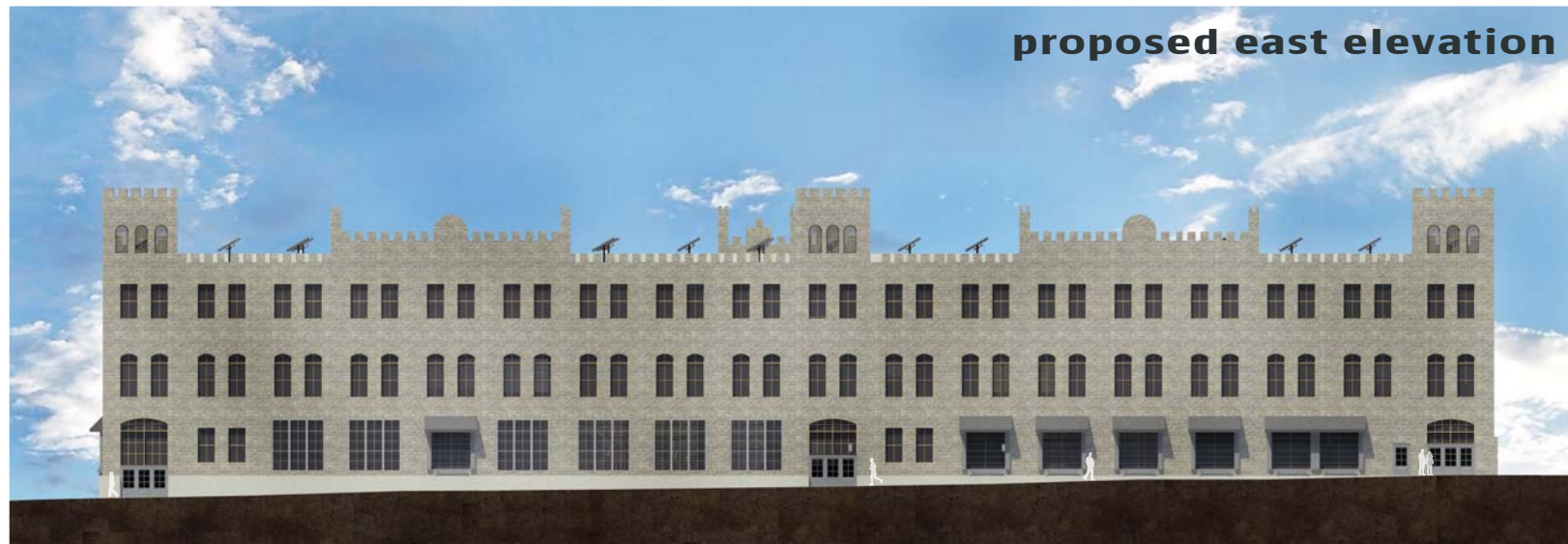
-James Marston Fitch

part of existing east elevation



In the past, building conversion often took place without regard for the history of the “character” of the structure. Today, deciding what to save and what to do with the buildings we do save are just the first steps. We must also be aware of how much we can change a building before it loses the very qualities we set out to preserve.

proposed east elevation



concept
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present
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adaptability

“If new architecture, the so-called ‘heritage of the future,’ is vital to towns and cities, the rediscovery and reuse of old buildings and areas is even more significant in underpinning urban life in the twenty-first century.”

-Kenneth Powell
Architecture Reborn: Converting Old Buildings for New Uses

Preservation for the future, then, involves designing buildings that are not only built to last, but that will also remain capable of offering new options for their use. More options for a building’s use will inevitably ensure the longevity of the structure. Industrial structures, for example, are particularly susceptible to adaptation due to the availability of capital for investment, market forces and the introduction of new technologies.

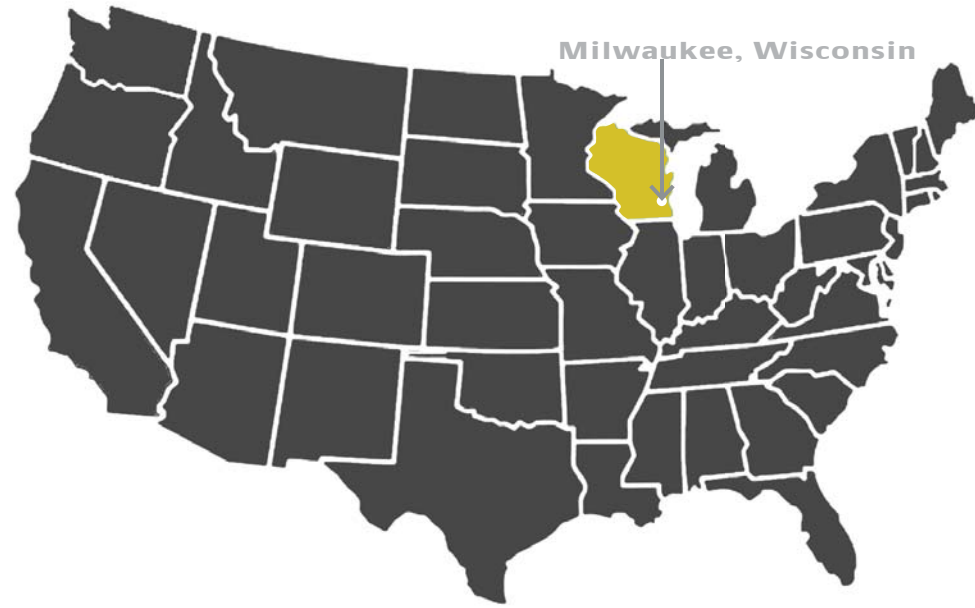


concept
past
present
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adaptability

**“A minor shift
in the way we define architecture,
from ‘the art of building’ to ‘the design-
science of the life of buildings’ could
transform the way civilization manages
its built environment toward long-term
responsibility and constant adaptivity.”**

-Stewart Brand
How Buildings Learn

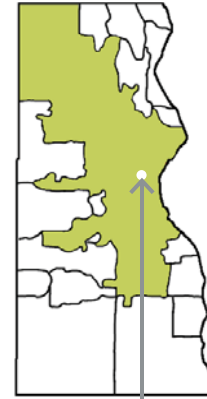




Milwaukee, Wisconsin



Milwaukee County



Milwaukee City Limits

Pabst Brewery Complex



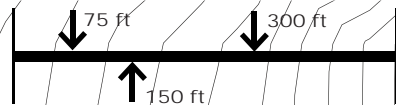
Pabst Brewery Complex

The historic Pabst Brewery complex is a prime example of Milwaukee's brewing past, and the Cream City brick, used on most of the buildings within the complex, is an everyday reminder of how industry has shaped not only the city of Milwaukee, but also its residents.

With proximity to the Milwaukee Area Technical College, the County Courthouse, Marquette University and the Aurora Sinai Medical Center, the Pabst Brewery complex is becoming Milwaukee's newest, sustainable downtown neighborhood.

site plan:

pabst bottling building - the brewery complex, milwaukee wi





Block 3 - Building 29 - Bottling Building *one of The Brewery's Historic Buildings

Year Built: 1910

Construction Type: Steel and timber-framed
 Cream City Brick exterior

Price: \$5,000,000

Size: Three-story building consisting of approximately 237,000 square feet. The first and second floors consist of approximately 95,000 square feet. The third floor has two distinct sections on the East and West ends of the building. Each of these sections have approximately 23,000 square feet.

The Bottling Building (Building 29) is located between North 10th Street and the newly reintroduced North 9th Street and is bordered by West Highland Avenue to the South. The approximately 237,000 square foot, three-story building sits on an eastward sloping site and offers a very unique, multi-leveled facade.

The Bottling Building has a very unique floor size for a building in a downtown location and is suitable for a wide range of commercial uses. Located directly across from this building is the 880 stall parking structure which opened for business in December 2009.

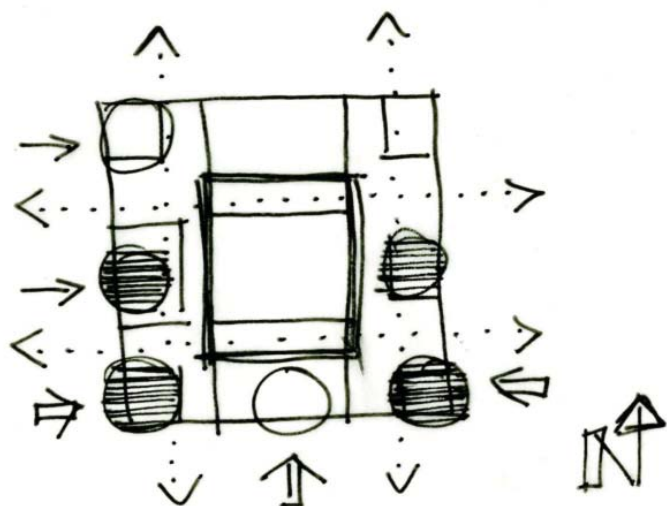
The Bottling Building is eligible for federal and state historic rehabilitation tax credits and is also located in a new market tax credit eligible census tract.



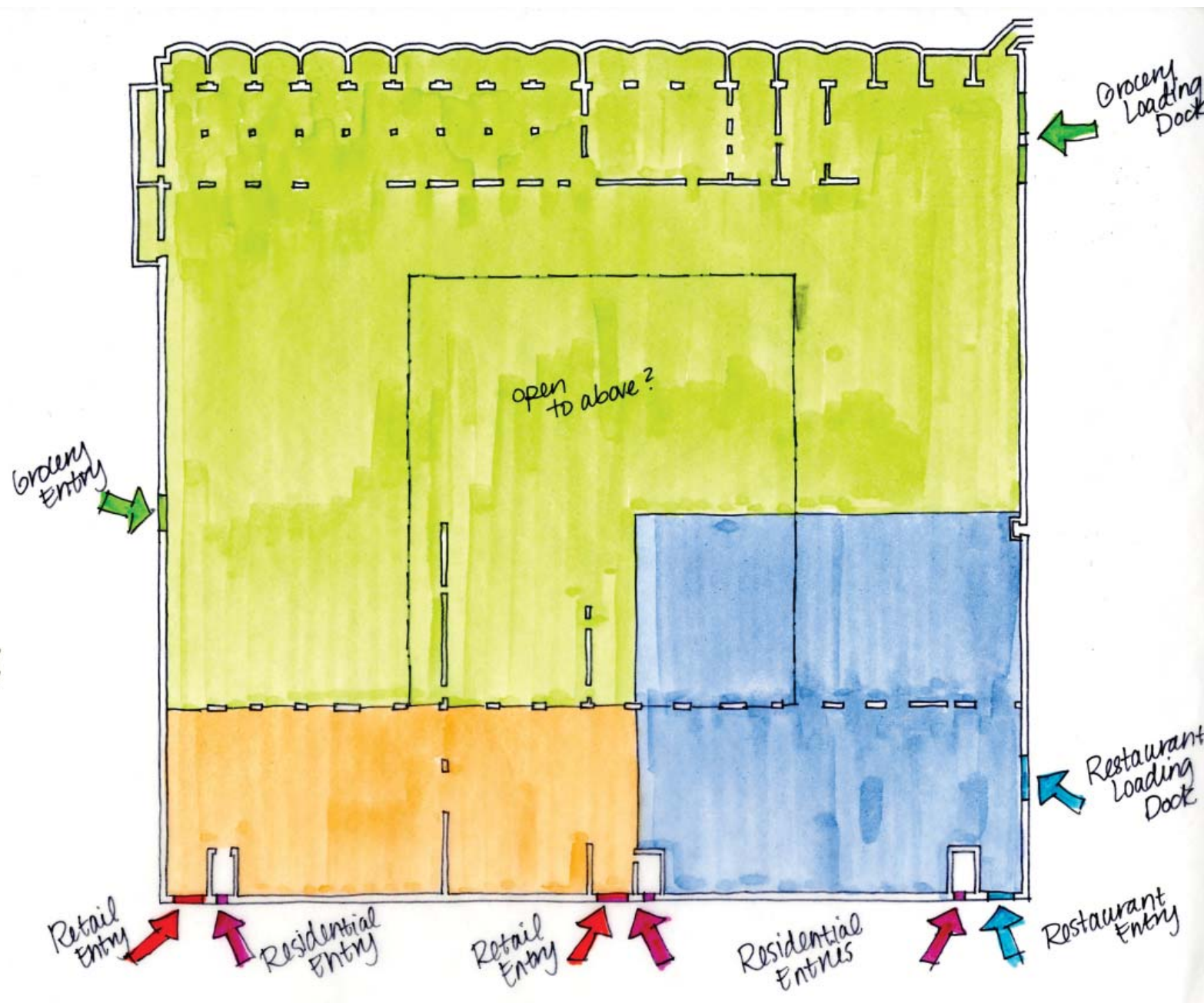
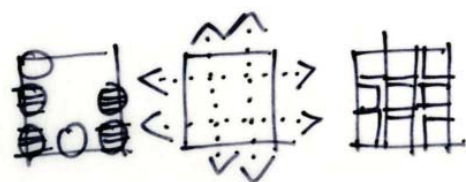
One important quality of old buildings is their ability to generate ideas for reuse based on their inherent qualities. Old buildings, representative of a community's history and character, have the power to excite people into developing economic and educational activities that would not have otherwise been considered.

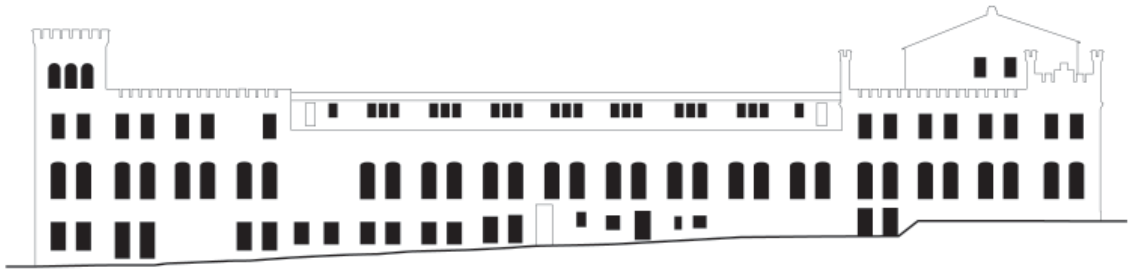
The importance of this site lies in the context/ environment in which it exists. In [re]developing and [re]purposing the existing industrial buildings, it is the goal of The Brewery Project to create a sustainable neighborhood that will positively influence the environment, the people who live and/or work there, and the financial success of the project.

Entry and Circulation

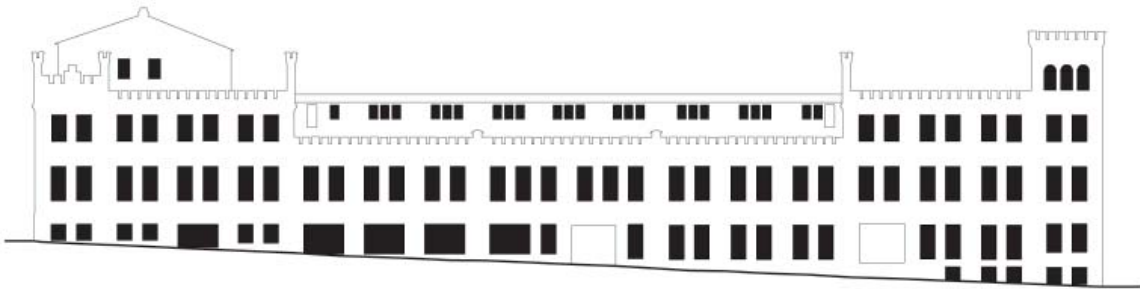
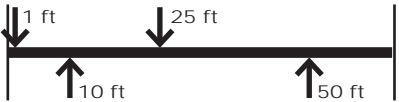


- ⇒ PROMINENT ENTRY
- SECONDARY ENTRY
- <...> HORIZONTAL TRANSPORTATION
- ENTRANCE
- VERTICAL TRANSPORTATION

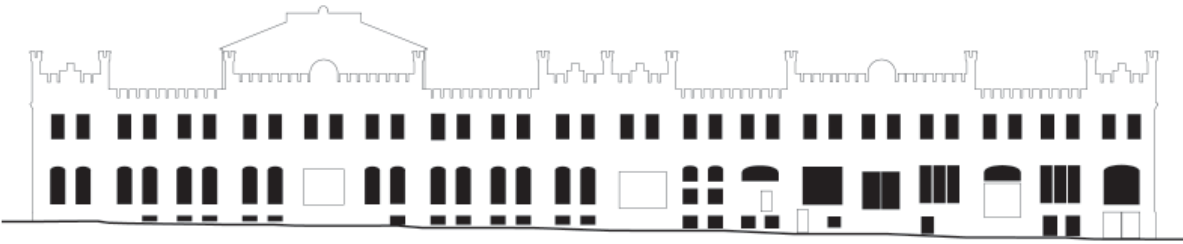
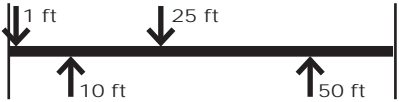




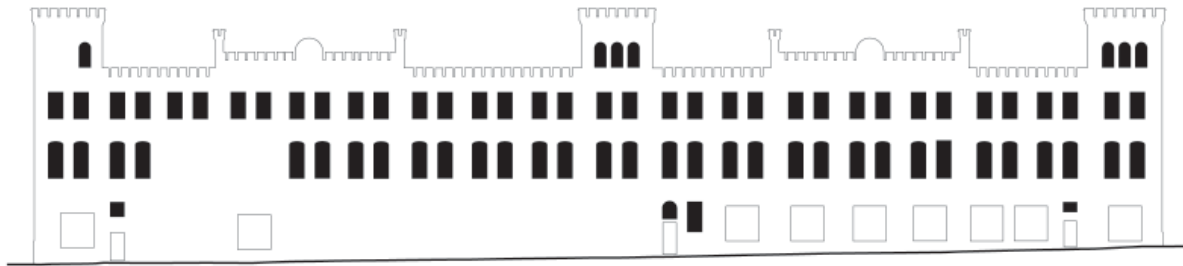
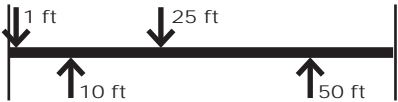
existing fenestration pattern - North



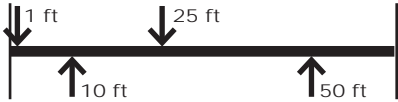
existing fenestration pattern - South



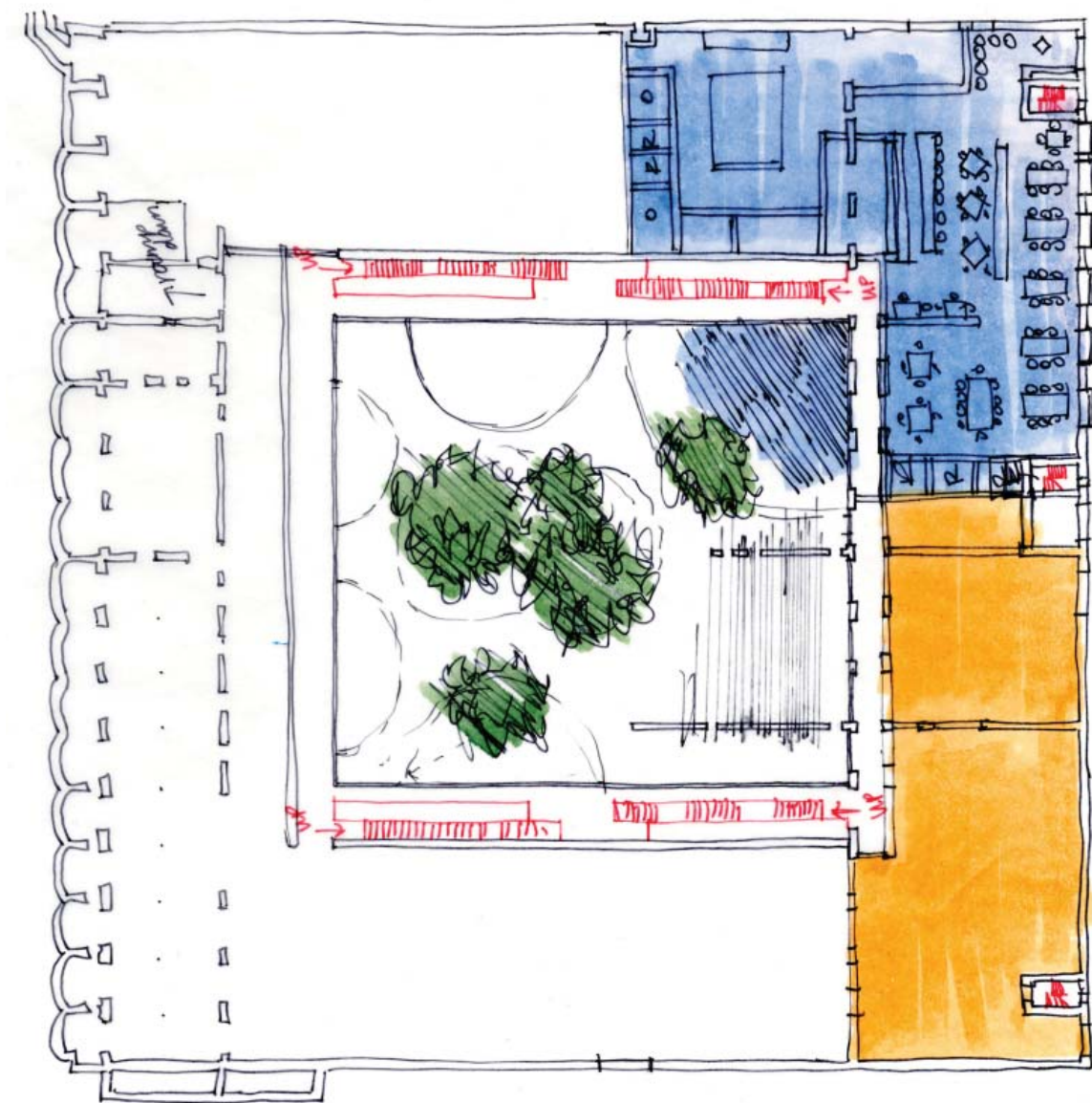
existing fenestration pattern - West



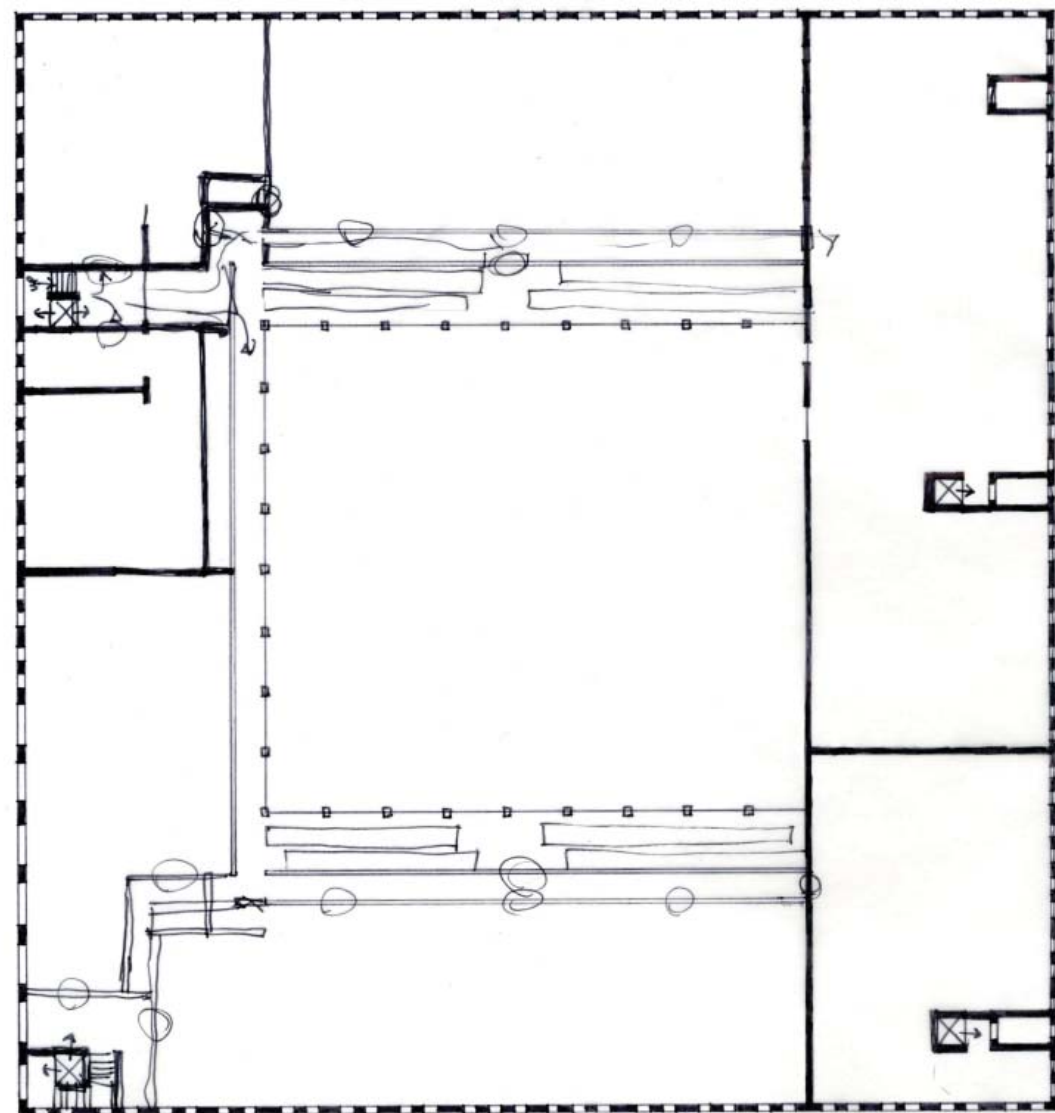
existing fenestration pattern - East



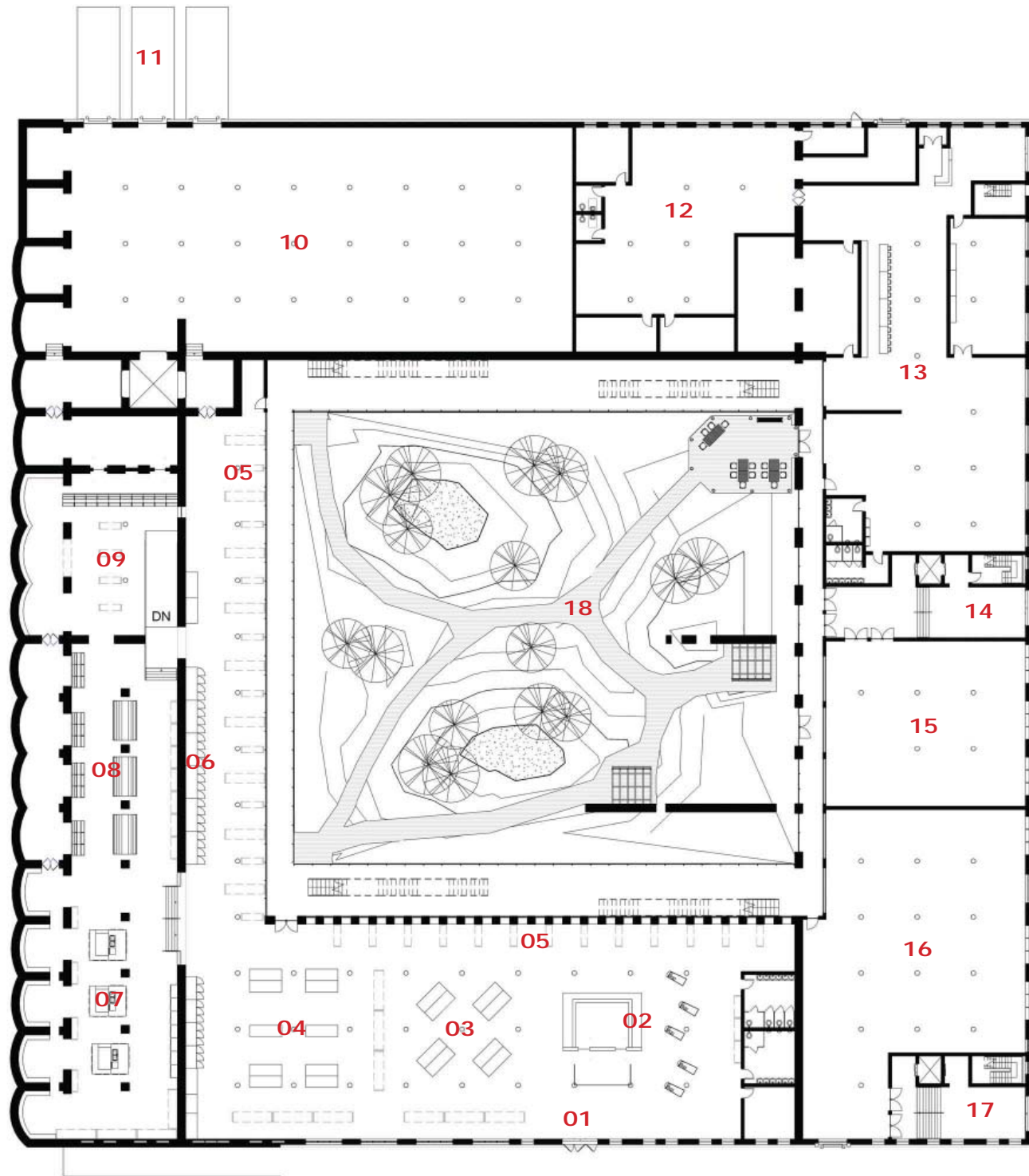
Introducing the Courtyard



Second Level Entrances







- 01- Grocery Entry
- 02- Customer Service / Check Out
- 03- Fresh Produce
- 04- Refrigerated Goods
- 05- Dry Goods
- 06- Frozen Goods
- 07- Prepared Foods
- 08- Deli / Meats
- 09- Bakery
- 10- Grocery Storage
- 11- Loading Docks
- 12- Bottling Building Restaurant Kitchen
- 13- Bottling Building Restaurant
Dining Room / Bar
- 14- East Center Grade Entrance
- 15- Speculative Retail - *approx. 2 800 sq ft*
- 16- Speculative Retail - *approx. 5 700 sq ft*
- 17- SE Corner Grade Entrance
- 18- Central Courtyard

ground level plan



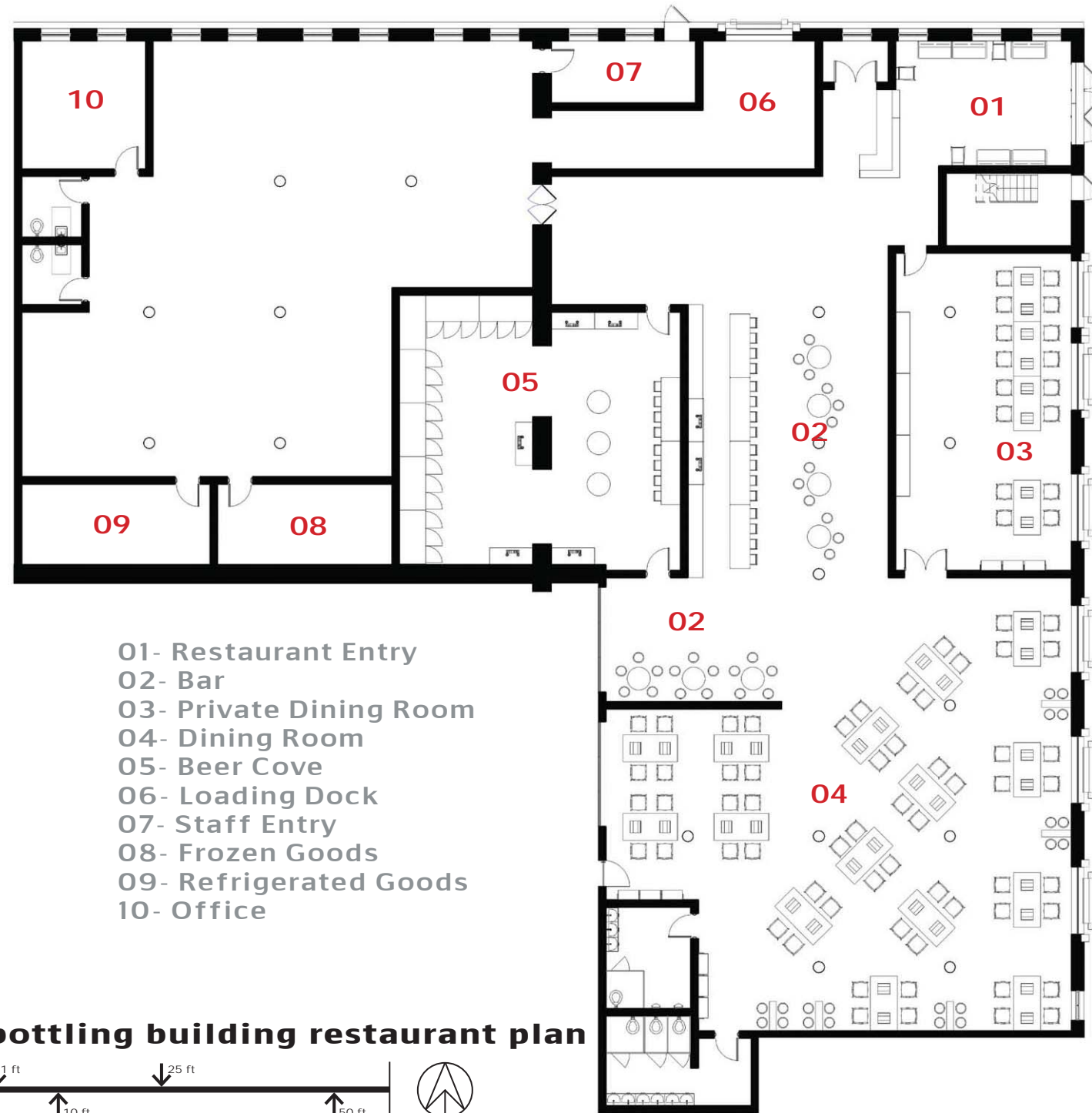


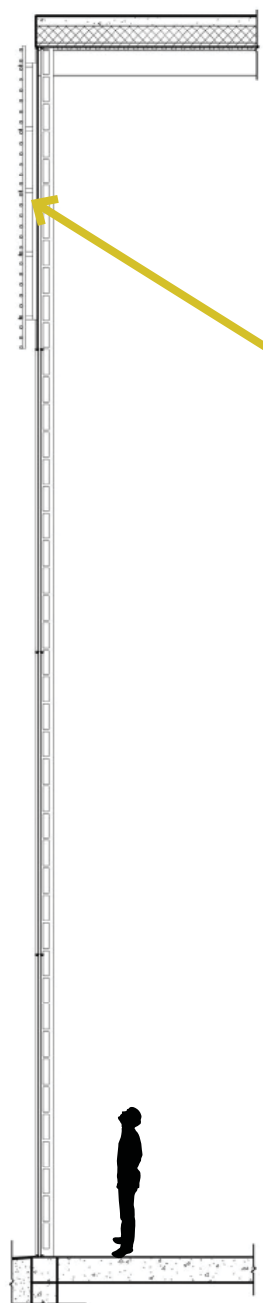
perspective:
view of courtyard from north stair corridor

Case Study:

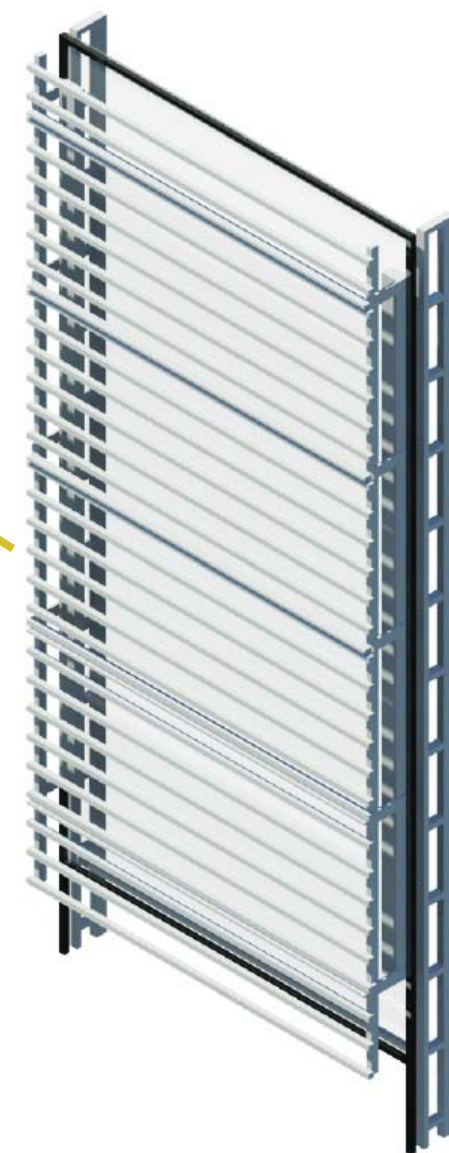
Ford Assembly Building

Boiler House Restaurant



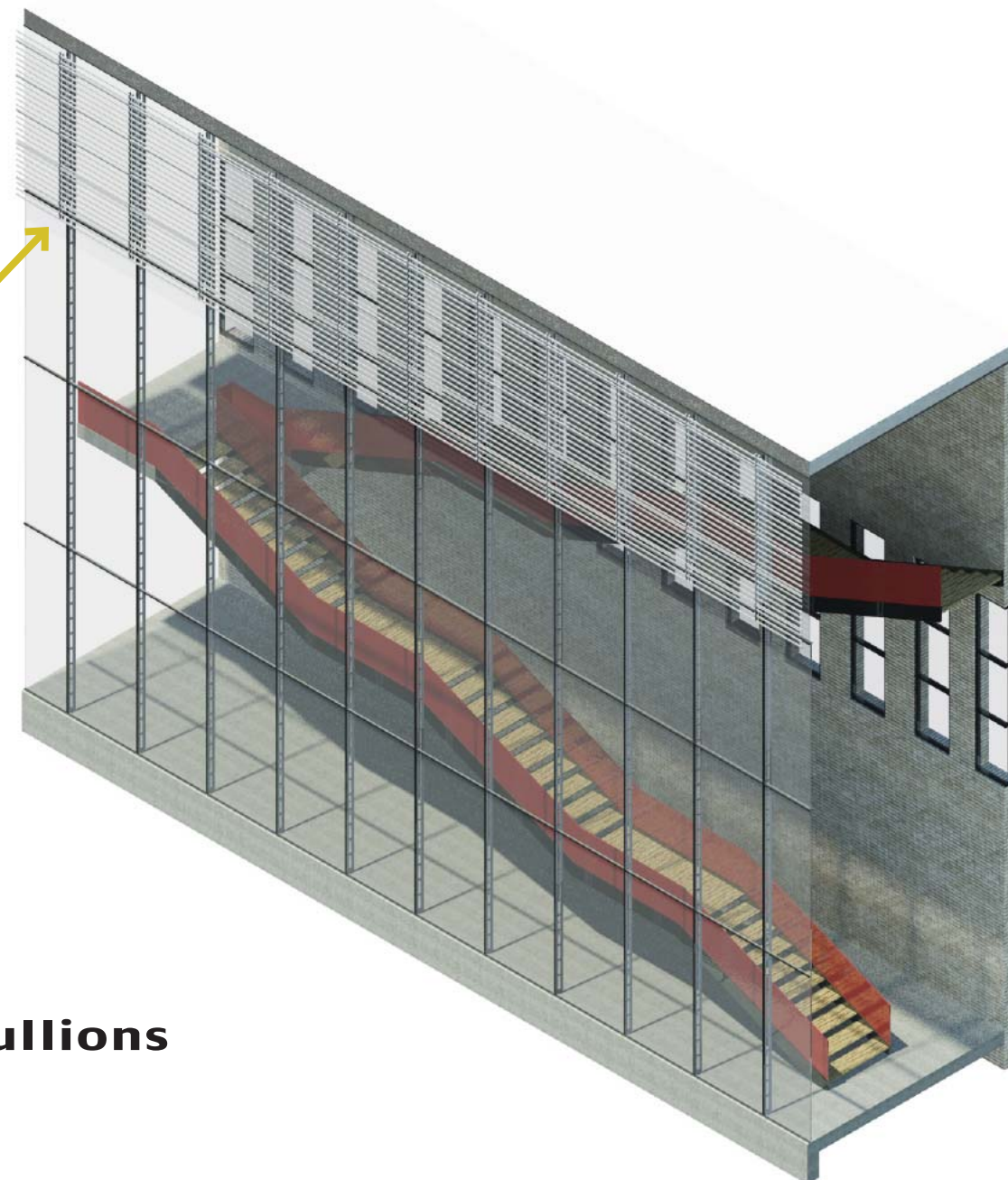


curtain wall detail



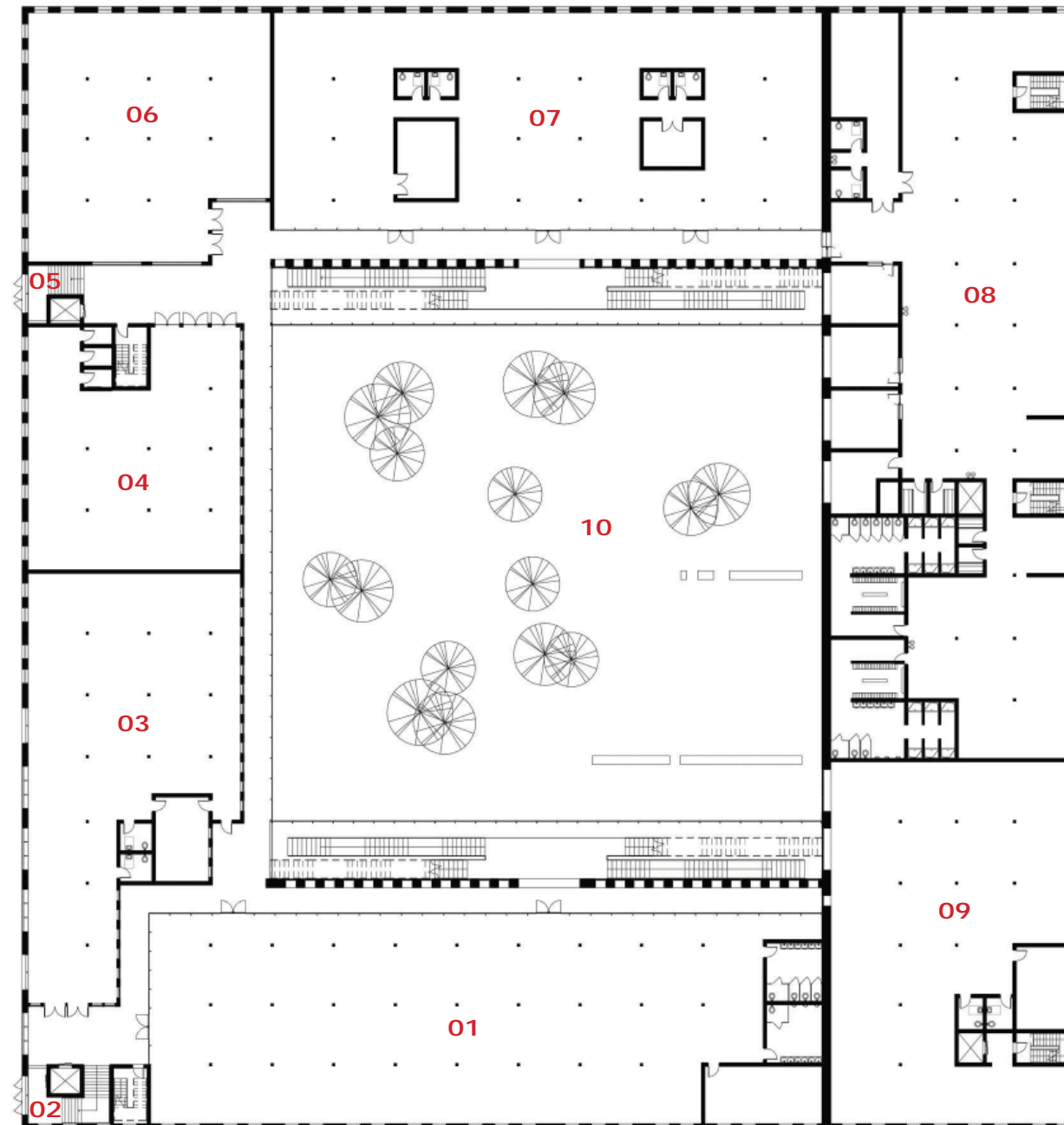
**axonometric view:
custom sun shade and mullions**

**axonometric view:
section of north stair corridor**



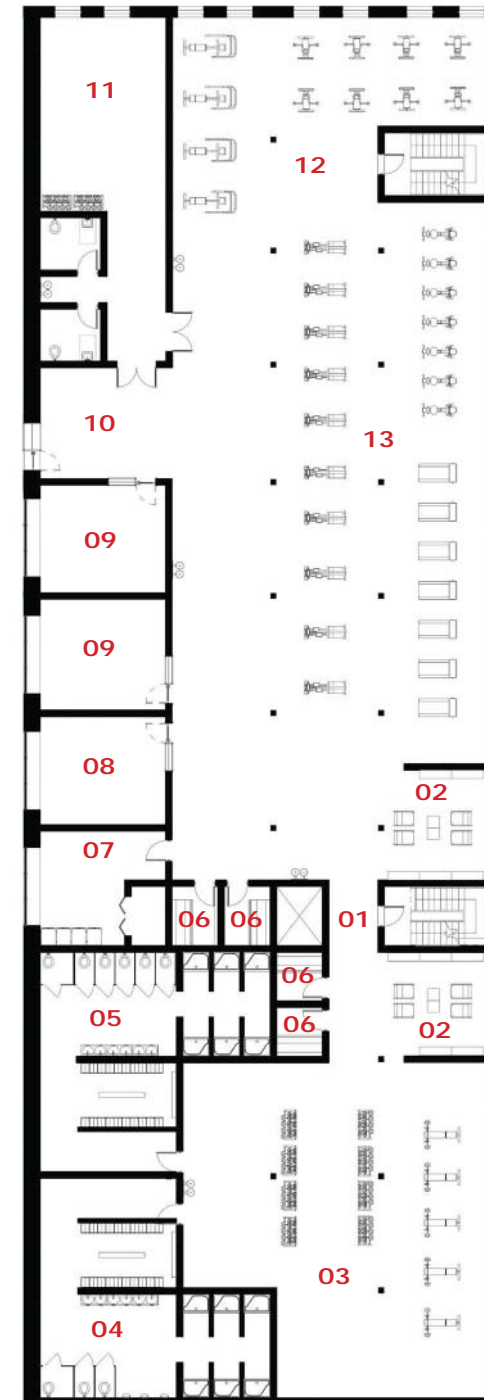
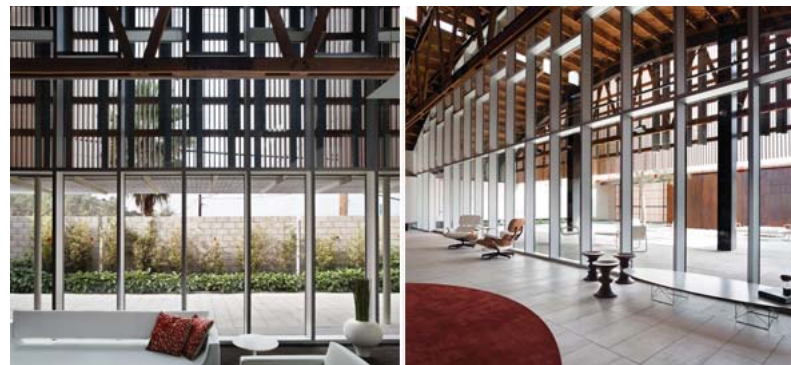
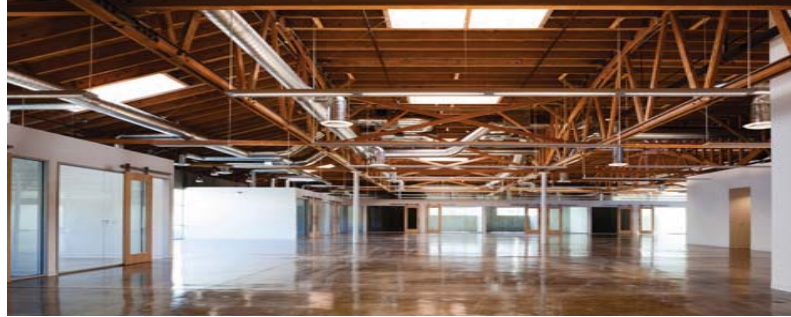
- 01- Commercial Office Space - *approx. 11 500 sq ft*
- 02- SW Corner Grade Entrance
- 03- Commercial Office Space - *approx. 5 600 sq ft*
- 04- Speculative Retail - *approx. 4 000 sq ft*
- 05- West Center Grade Entrance
- 06- Speculative Retail - *approx. 4 500 sq ft*
- 07- Commercial Office Space - *approx. 9 600 sq ft*
- 08- Fitness Center
- 09- Commercial Office Space - *approx. 6 200 sq ft*
- 10- Central Courtyard

first level plan



Case Study:

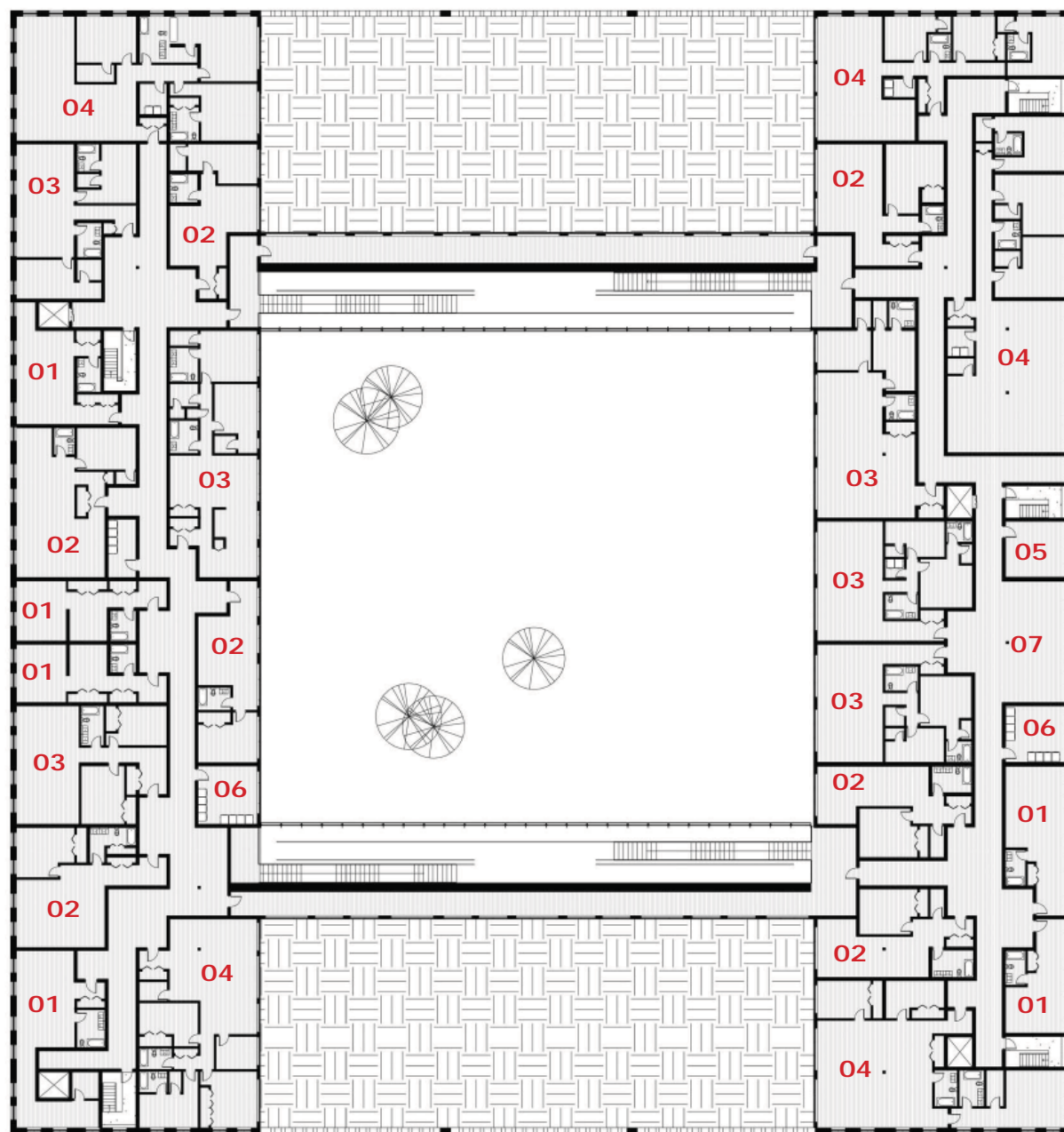
3641 Holdrege Avenue



fitness center plan



- 01- Main Entry
- 02- Lounge Space
- 03- Free Weights
- 04- Men's Locker Room
- 05- Women's Locker Room
- 06- Tanning Bed
- 07- Laundry/Storage/Mechanical
- 08- Fitness Center Main Office
- 09- Personal Trainer's Office
- 10- Secondary Entry
- 11- Fitness Studio
- 12- Workout Equipment
- 13- Aerobic Equipment

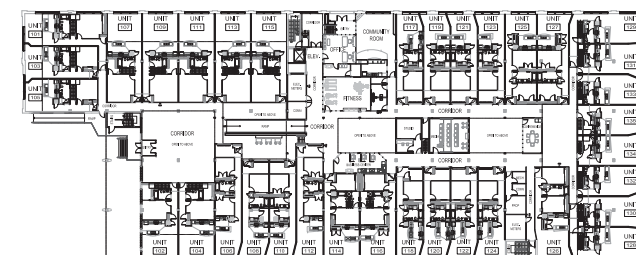
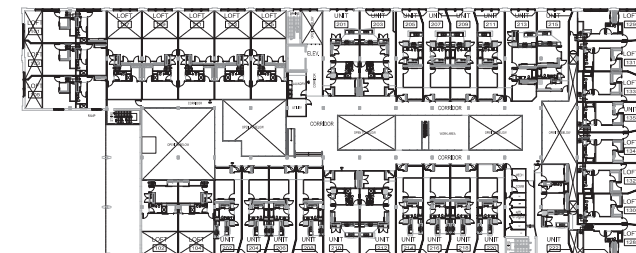


third level plan



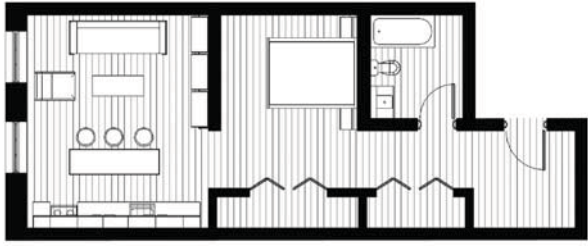
- 01- Efficiency Apartment
- 02- One Bedroom Apartment
- 03- Two Bedroom Apartment
- 04- Three Bedroom Apartment
- 05- Office/Mailroom
- 06- Laundry
- 07- Community Space

Case Study: The Blue Ribbon Lofts

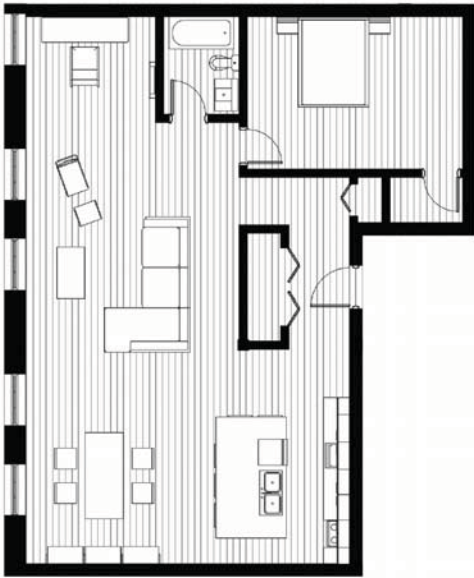


perspective:
view of two bedroom apartment layout





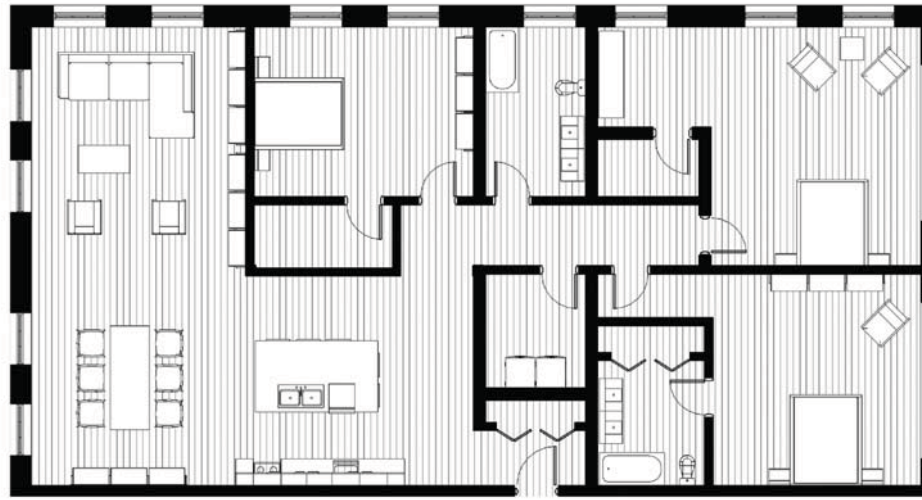
efficiency apartment plan



one bedroom apartment plan



two bedroom apartment plan



three bedroom apartment plan



Apartment Breakdown:

Efficiencies - 6

One Bedroom, One Bath - 7

Two Bedroom, One or Two Bath - 6

Three Bedroom, Two Bath - 5

questions?

